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Year: 2013

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## **Supporting voice content sharing among underprivileged people in urban India**

Remy, Christian ; Agarwal, Sheetal K ; Kumar, Arun ; Srivastava, Saurabh

**Abstract:** Recent advances in voice-based telecom information systems enable underprivileged and low-literacy users to access and offer online services without expensive devices or specialized technical knowledge. We propose SRLs (speech resource locators), a mechanism that facilitates the creation, access, and sharing of online voice content. To test the interaction with SRLs, we developed a proof-of-concept application that allows for simple sharing of voice content. We subsequently created a smartphone application for the same service that provided a graphical user interface to the online voice application. Our findings show that literate underprivileged people were able to share online voice content on feature phones and smart phones whereas in low-literacy people were unable to access shared content over feature phones but able to do so on smart phones. We conclude by highlighting opportunities and challenges for the design of voice-based applications that support information sharing.

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Conference or Workshop Item

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# Programme

## ***INTERACT 2013***

14<sup>th</sup> IFIP TC13 Conference on Human-Computer Interaction,  
Cape Town, South Africa, September 2013



**INTERACT 2013**  
*designing for diversity*



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## WELCOME

INTERACT 2013 is the 14th of a series of INTERACT international conferences supported by the International Federation for Information Processing (IFIP) Technical Committee 13 on Human–Computer Interaction (HCI). INTERACT 2013 is taking place 29 years after the first INTERACT held in September 1984 in London, UK. The IFIP Technical Committee 13 aims to develop the science and technology of the interaction between humans and computing devices through different Working Groups and Special Interests Groups, all of which, together with their officers, are listed within these proceedings.

INTERACT 2013 brought the Conference to South Africa and Africa for the very first time; to the very southern tip of Africa and the beautiful city of Cape Town. The African tradition of HCI focuses very much on the human and social aspects of HCI, recognizing the diversity of its people and the context in which they go about their everyday lives. We hope that INTERACT 2013 will be remembered as a conference that brought the diversity of HCI research to the forefront, making the digital world a better place for all, regardless of where they come from.

Like its predecessors, INTERACT 2013 highlights, to both the academic and the industrial world, the importance of the HCI discipline and its most recent breakthroughs on current applications. Both experienced HCI researchers and professionals, as well as newcomers to the HCI field, interested in designing or evaluating interactive software, developing new interaction technologies, or investigating overarching theories of HCI, would find INTERACT 2013 an exciting forum for communication with people of similar interests, to encourage collaboration and to learn.

The Conference theme for INTERACT 2013, ‘Designing for Diversity’, recognizes the interdisciplinary, multidisciplinary and intercultural spirit of HCI research and practice. The Conference welcomes research and reports of practice that acknowledges diverse disciplines, abilities, cultures and societies, which address both the technical and social aspects of HCI. Within the broad umbrella of HCI, the Conference sought contributions addressing new and emerging HCI disciplines, bridging cultural differences, and tackling important social problems.

INTERACT 2013 is organized by the Nelson Mandela Metropolitan University (Port Elizabeth) and the Meraka Institute of Council for Scientific and Industrial Research (Pretoria), in collaboration with the University of Cape Town.

We thank all the authors and the presenters who chose INTERACT 2013 as the venue to publish their research. This was again an outstanding year for the Conference in terms of submissions in all the technical categories, especially since the Conference moved away from the traditional predominantly European venues. In total, we received 639 submissions. Of these 270 submissions were accepted:

- 128 as full research papers.
- 77 as short research papers.
- 31 as interactive posters.
- 2 as industrial programme papers.
- 4 as panels.
- 1 as a special interest group.
- 1 as a tutorial.
- 9 as workshops.
- 9 to the African Masters Consortium.
- 8 to the Doctoral Consortium.

The acceptance rate for the full and short research papers was 31% and 45% respectively.

A Programme Committee meeting consisting of the Technical Programme Chairs and the Track Chairs, as well as member of IFIP Technical Committee 13, deliberated the final decision on which submissions to accept. This significant effort was only possible due to the diligent work of many people. Our sincere gratitude goes to the almost 700 members of our International Programme Committee who willingly assisted and ensured the high quality of the INTERACT Conference papers was properly maintained. Although some people had to be bullied into reviewing (sorry about that), everyone submitted their reviews on time without a murmur of complaint. Thank you all for the effort that you so obviously put into this task. A special thank you must go to our Track Chairs, who have put in a

tremendous amount of work to ensure that quality was maintained throughout.

In addition we have to thank the members of the Organizing Committee, the staff at the Council for Industrial and Scientific Research, Nelson Mandela Metropolitan University and the University of Cape Town for their unflagging assistance with all aspects of planning and managing the many administrative and organizational issues. We also have to thank our student volunteers for making sure that everything runs smoothly at the Conference itself.

We also have to thanks the staff of the Cape Town International Convention Centre and their associated service providers, the staff and service providers of the Clock Tower Pavilion and the staff and service providers of the Two Oceans Aquarium, for the professional way in which they handled the arrangements and logistics related to the Conference.

We also wish to express a special thank you to the Proceedings Publication Chair, Marco Winckler, who painstakingly put the proceedings volumes together.

Finally, we have to thank the many individuals who volunteered to assist with organising the Conference and making sure everything runs smoothly during the Conference.

We hope you enjoy INTERACT 2013 to the fullest, experience South African hospitality at its very best, and have great fun in the most beautiful city in the world, Cape Town, nestling on the slopes of one of the New 7 Wonders of the World, Table Mountain.

***Paula Kotzé and Janet Wesson (INTERACT 2013 Conference Chairs)***

***Gary Marsden and Gitte Lindgaard (INTERACT 2013 Technical Programme Chairs)***

September 2013



## MONDAY 2 SEPTEMBER 2013

**07:30 – 8:45: Registration for Monday Workshops and Masters Consortium only**

Venue: Jasminum and Strelitzia Conservatories

**07:30 – 8:45: Welcome Refreshments**

Venue: Jasminum and Strelitzia Conservatories

**9:30 – 17:00: Registration for Tuesday Workshops, Tutorial and Consortium, as well as for the Main INTERACT 2013 Conference**

Venue: Jasminum and Strelitzia Conservatories

**9:00 – 17:00: Workshops and Consortiums**

### Day Schedule

- Session 1: 9:00 – 10:30
- Mid-morning Refreshments: 10:30 – 11:00
- Session 2: 11:00 – 12:30
- Lunch: 12:30 – 13:30
- Session 3: 13:30 – 15:00
- Mid-afternoon Refreshments: 15:00 – 15:30
- Session 4: 15:30 – 17:00
- 17:00 – 19:30: IFIP TC 13 Working Group Business Meetings

Time: 09:00 – 17:00

Venue: Room 1.41

**Workshop: Building Community Collaboration**

**Workshop facilitators:** *Anicia Peters, Darelle van Greunen, Heike Winschiers-Theophilus, Shilumbe Chivuno-Kuria, Kagonya Awori and Anirudha Joshi*

Time: 09:00 – 17:00

Venue: Room 1.42

**Workshop: Challenges from the Future: bridging the gaps through HCI education**

**Workshop facilitators:** *Lars Oestreicher and Paula Alexandra Silva*

Time: 09:00 – 17:00

Venue: Room 1.43

**Workshop: Human Work Interaction Design (HWID): past history and future challenges**

**Workshop facilitators:** *Torkil Clemmensen, Jose Abdelnour Nocer and Arminda Lopes*

Time: 17:30 – 19:30

Venue: Room 1.43

**WG 13.6 (Human Work Interaction Design) Business Meeting** (Chair: Torkil Clemmensen)

Time: 09:00 – 17:00

Venue: Room 1.44

**Workshop: Rethinking Universal Accessibility: A broader approach considering the digital gap**

**Workshop facilitators:** *Julio Abascal, Simone D. J. Barbosa, Andrew Dearden, Anirudha Joshi, Daniel Orwa Ochieng, Gerhard Weber and Panayiotis Zaphiris*

Time: 09:00 – 17:00

Venue: Room 1.61

**Workshop: Walking for Data**

**Workshop facilitators:** *Mads Bødker, David Browning and Nina Dam Meinhardt*

Time: 09:00 – 17:00

Venue: Room 1.62

**African Masters Consortium**

## TUESDAY 3 SEPTEMBER 2013

**07:30 – 8:45: Registration for Tuesday Workshops, Tutorial and Doctoral Consortium only**

Venue: Jasminum and Strelitzia Conservatories

**07:30 – 8:45: Welcome Refreshments**

Venue: Jasminum and Strelitzia Conservatories

**9:30 – 17:00: Registration for Tuesday Workshops, Tutorial and Consortium, as well as for the Main INTERACT 2013 Conference**

Venue: Jasminum and Strelitzia Conservatories

**9:00 – 17:00: Workshops and Consortiums**

### Day Schedule

- Session 1: 9:00 – 10:30
- Mid-morning refreshments: 10:30 – 11:00
- Session 2: 11:00 – 12:30
- Lunch: 12:30 – 13:30
- Session 3: 13:30 – 15:00
- Mid-afternoon refreshments: 15:00 – 15:30
- Session 4: 15:30 – 17:00
- 17:00 – 19:30: IFIP TC 13 Working Group business meetings

Time: 09:00 – 17:00

Venue: Room 1.41

**Workshop: Peripheral Interaction: embedding HCI in everyday life**

**Workshop facilitators:** *Doris Hausen, Saskia Bakker, Elise van den Hoven, Andreas Butz and Berry Eggen*

Time: 09:00 – 17:00

Venue: Room 1.42

**Workshop: Participatory Design for Persons with Cognitive or Sensory Impairments**

**Workshop facilitators:** *Karin Slegers, Pieter Duysburgh, Niels Hendriks and Helma van Rijn*

Time: 09:00 – 17:00

Venue: Room 1.43

**Workshop: Second International Workshop on (Re)Creating Lively Cities through Ambient Technologies: Arts, Culture and Gastronomic Experiences**

**Workshop facilitators:** *Artur Lugmayr, Jaz Hee-jeong Choi and Kirralie Houghton*

Time: 09:00 – 17:00

Venue: Room 1.44

**Workshop: Urban Agriculture: A Growing Field of Research**

**Workshop facilitators:** *Peter Lyle, Jaz Hee-jeong Choi, Shaun Lawson, Christopher Lueg, Alan Chamberlain, Marcus Foth, Anna Meroni and Margot Brereton*

Time: 09:00 – 17:00

Venue: Room 1.61

**Tutorial : Designing High-Quality Surveys for HCI Research**

**Tutorial Presenters:** *Hendrik Müller and Aaron Sedley*

Time: 09:00 – 17:00

Venue: Room 1.62

**Doctoral Consortium**



## WEDNESDAY 4 SEPTEMBER 2013

### 07:30 – 8:45: Registration and Welcome Refreshments

Venue: Jasminum and Strelitzia Conservatories

### Day Schedule

- Plenary Session : 08:45 – 10:45
- Mid-morning refreshments: 10:45 – 11:15
- Parallel Sessions: 11:15 – 12:30
- Lunch: 12:30 – 13:30
- Parallel Sessions: 13:30 – 15:00
- Mid-afternoon refreshments: 15:00 – 15:30
- Parallel Sessions: 15:30 – 17:00
- 17:00 – 18:30: IFIP TC 13 Working Group business meetings
- 19:00 – 21: 30: Conference Reception

### 08:45 – 10:45: Plenary Session

Venue: Auditorium 2

### 8:45 – 9:45: INTERACT 2013 Conference Opening

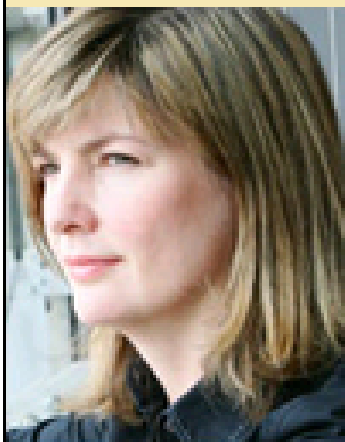
Welcome Address

IFIP TC 13 Award Ceremony

Session Chairs: Paula Kotzé and Janet Wesson (South Africa)

### 9:45 – 10:45: Keynote Address: *Abigail Sellen*

Session Chair: Gary Marsden (South Africa)



#### Topic: Designing Hybrid Input Paradigms

Visions of multimodal interaction with computers are as old as the field of HCI itself: by adding voice, gesture, gaze and other forms of input, the hope is that engaging with computers might be more efficient, expressive and natural. Yet it is only in the last decade that the dominance of multi-touch and the rise of gesture-based interaction are radically altering the ways we interact with computers. On the one hand these changes are inspirational and open up the design space; on the other hand, it has caused fractionation in interface design and added complexity for users. Many of these complexities are caused by layering new forms of input on top of existing systems and practices. I will discuss our own recent adventures in trying to design and implement these hybrid forms of input, and highlight the challenges and the opportunities for future input paradigms. In particular, I conclude that the acid test for any of these new techniques is testing in the wild. Only then can we really design for diversity of people and of experiences.

#### About Abigail Sellen:

Abigail Sellen is a Principal Researcher at Microsoft Research Cambridge UK and co-manager of Socio-Digital Systems, an interdisciplinary group with a focus on the human perspective in computing. Originally graduating with a PhD in Cognitive Science, and a Master's in Industrial Engineering, her career has spanned industrial research labs such as Apple Computer, Xerox's Cambridge Research Centre and Hewlett Packard, Bristol. She has published widely in Human-Computer Interaction, including "The Myth of the Paperless Office" with co-author Richard Harper, which won an IEEE award. She is a Fellow of the British Computer Society, a Professor of Interaction at the University of Nottingham, a member of the ACM CHI Academy, and in 2011 was elected a Fellow of the Royal Academy of Engineering.

**10:45 - 11:15: Mid-morning refreshments**

Venue: Jasminum and Strelitzia Conservatories

**11:15 – 12:30: Parallel Sessions****Industry Day Keynote: Susan Dray**

Time: 11:15 – 12:30

Venue: Auditorium 2

Session Chair: Shikoh Gitau (Kenya)

**Topic: What Africa can teach the rest of the world (and what it can learn)**

As African companies become more and more engaged with human-centered design, it is important to remember that there is much that Africa can teach the world at the same time that there is much Africa can learn from the rest of the world. In this talk, I will focus on three lessons from Africa that I believe the rest of the world can and should learn. I will also discuss three things that I believe will be important for African companies to learn from the process of design from outside the continent.

**About Susan Dray:**

Susan Dray has worked to improve the fit between technology and people since 1979, initially as a member of a human factors research group at Honeywell, and later championing usability of corporate systems at American Express. Since founding her consulting firm, Dray & Associates, in 1993, she has helped clients create innovative products and services that are useful, usable, and desirable by providing user experience research for a wide range of products, systems, and applications. She has worked in many countries around the world, and is widely known for her expertise in international user studies.

Through her many professional activities, Susan has contributed to the development of the user experience, user centered design, and usability professions. She is a Fellow of the Human Factors and Ergonomics Society, recipient of the Lifetime Service Award from the Association for Computing Machinery Special Interest Group in Computer Human Interaction (ACM-SIGCHI) and was named a Distinguished Engineer of ACM. She is currently the Director of Publications on the Board of Directors of the User Experience Professionals Association.

**Road Safety**

Time: 11:15 – 12:30

Venue: Room 1.41

Session Chair: Stephen Brewster (UK)

(L) Don't Text while Driving: the effect of smartphone text messaging on road safety during simulated driving

*Kaspar Lyngsie, Martin S. Pedersen, Jan Stage and Kim F. Vestergaard*

(L) Assisting the Driver with Distance Estimation: usability evaluation of graphical presentation alternatives for local traffic events

*Angela Mahr, Sandro Castronovo, Rafael Math and Christian Müller*

(S) Culturally Independent Gestures for In-Car Interactions

*Sebastian Loehmann, Martin Knobel, Melanie Lamara and Andreas Butz*

**Tracking eyes and head**

Time: 11:15 – 12:30

Venue: Room 1.42

Session Chair: Helene Gelderblom (South Africa)

(L) Studying a Head Tracking Technique for First-Person-Shooter Games in a Home Setting  
*Torben Sko, Henry Gardner and Michael Martin*

(L) One Half or 50%? An Eye-Tracking Study of Number Representation Readability  
*Luz Rello, Susana Bautista, Ricardo Baeza-Yates, Pablo Gervás, Raquel Hervás and Horacio Saggion*

(S) Tracking Eyes in Service Prototyping  
*Monchu Chen and Veranika Lim*

**Usability evaluation and Technology acceptance**

Time: 11:15 – 12:30

Venue: Room 1.43

Session Chair: Helen Petrie (UK)

(L) Social Overlays: collectively making websites more usable  
*Tao Dong, Mark S. Ackerman, Mark W. Newman and Gaurav Paruthi*

(S) Understanding Diversity – The Impact of Personality on Technology Acceptance  
*Kay Behrenbruch, Matthias Soellner, Jan Marco Leimeister and Ludger Schmidt*

(S) Did We Miss Something? Correspondence Analysis of Usability Data  
*Stanislaw Zabramski and Wolfgang*

(S) Usability Evaluation in a Digitally Emerging Country: a survey study  
*Fulvio Lizano, Maria Marta Sandoval, Anders Brunn and Jan Stage Stuerzlinger*

**User requirements capture and analysis**

Time: 11:15 – 12:30

Venue: Room 1.44

Session Chair: Netta Iivari (Finland)

(L) Designing for the Functionality South African Internet Banking Websites should provide to address the Needs of Generation-Y users  
*Sebatatso Mtinkulu, Judy van Biljon and Toby van Dyk*

(L) “Nobody Other than me Knows what I Want”: customizing a sports watch  
*Piia Nurkka*

(S) Online Requirements and Portal Design for Female University Science & Technology Students in Kenya  
*Stephen Kimani, Eunice Njeri, and John Njue*

**Design and evaluation**

Time: 11:15 – 12:30

Venue: Room 1.61

Session Chair: Lars Oestreicher (Sweden)

(L) WATTSBurning: design and evaluation of an innovative eco-feedback system  
*Filipe Quintal, Lucas Pereira, Nuno Nunes, Valentina Nisi and Mary Barreto*

(S) The Influence of Website Category on Aesthetic Preferences  
*Eleftherios Papachristos and Nikolaos Avouris*

S :Homestead Creator: using card sorting in search for culture-aware categorizations of interface objects  
*Kasper Rodil, Matthias Rehm and Heike Winschiers-Theophilus*

(L) Evaluating Multivariate Visualizations as Multi-Objective Decision Aids  
*Meirav Taieb-Maimon, Lior Limonad, David Amid, David Boaz and Ateret Anaby-Tavor*

**Facilitating social behaviour and collaboration I**

Time: 11:15 – 12:30

Venue: Room 1.63

Session Chair: Anicia Peters (USA)

(L) Performing Online and Offline: how DJs use social networks  
*Mayur Karnik, Ian Oakley and Valentina Nisi*

(L) Tension Space Analysis: exploring community requirements for networked urban screens  
*Steve North, Holger Schnädelbach, Ava Fatah gen Schieck, Wallis Motta, Lei Ye, Moritz Behrens and Efsthia Kostopoulou*

(S) A Tabletop System Using Infrared Image Recognition for Multi-user Identification  
*Shota Suto and Susumu Shibusawa*

(11:15 – 12:30 Session continues overleaf)

**Gesture and tactile user interfaces**

Time: 11:15 – 12:30

Venue: Room 1.63

Session Chair: Beryl Plimmer (New Zealand)

(L) TactiPEd: easy prototyping of tactile patterns  
*Sabrina Paněels, Margarita Anastassova and Lucie Brunet*

(L) Metamodels Infrastructure and Heuristics for Metamodel-Driven Multi-Touch Interaction  
*Víctor López-Jaquero, Elena Navarro, Francisco Montero and Pascual González*

(S) Designing Gesture-Based Control for Factory Automation

*Tomi Heimonen, Jaakko Hakulinen, Markku Turunen, Jussi P. P. Jokinen, Tuuli Keskinen and Roope Raisamo*

**12:30 – 13:30: Lunch**

Venue: Jasminum and Strelitzia Conservatories

**13:30 – 15:00: Parallel Sessions****Industry Day - Papers**

Time: 13:30 – 15:00

Venue: Auditorium 2

Session Chair: Jacki O'Neill (France)

Lessons Learned from Designing Non-traditional Interfaces for Educational Applications in South Africa  
*Michael Wolf*

The Bigger Picture: The Use of Mobile Photos in Shopping  
*Maryam Tohidi and Andrew Warr*

**Navigation aids**

Time: 13:30 – 15:00

Venue: Room 1.42

Session Chair: Sidney Fels (Canada)

(L) User-centric vs. System-centric Evaluation of Recommender Systems  
*Paolo Cremonesi, Franca Garzotto and Roberto Turrin*

(L) Video Navigation with a Personal Viewing History  
*Abir Al-Hajri, Gregor Miller, Sidney Fels and Matthew Fong*

(L) Hoptrees: branching history navigation for hierarchies  
*Michael Brooks, Jevin D. West, Cecilia R. Aragon and Carl T. Bergstrom*

**Seniors and usability**

Time: 13:30 – 15:00

Venue: Room 1.41

Session Chair: Shilumbe Chivuno-Kuria (Namibia)

(L) Ageing, Technology Anxiety and Intuitive Use of Complex Interfaces  
*Raghavendra Reddy Gudur, Alethea Blackler, Vesna Popovic and Doug Mahar*

(L) Question-Answer Cards for an Inclusive Micro-Tasking Framework for the Elderly  
*Masatomo Kobayashi, Tatsuya Ishihara, Akihiro Kosugi, Hironobu Takagi and Chieko Asakawa*

(S) Emerging Technologies and the Contextual and Contingent Experiences of Ageing Well  
*Toni Robertson, Jeannette Durick, Margot Brereton, Kate Vaisutis, Frank Vetere, Bjorn Nansen and Steve Howard*

**User preferences and behaviour**

Time: 13:30 – 15:00

Venue: Room 1.43

Session Chair: Torkil Clemmensen (Denmark)

(L) Characteristics of Elderly User Behavior on Mobile Multi-Touch Devices  
*Susumu Harada, Daisuke Sato, Hironobu Takagi and Chieko Asakawa*

(S) On Users' Preference on Localized vs. Latin-based CAPTCHA Challenges  
*Christos Fidas and Artemios Vogiatzis*

(S) A Vocabulary to Access Users' Cultural Perspectives in Human-Computer Interaction  
*Catia Maria Dias Ferreira, Luciana Cardoso de Castro Salgado and Clarisse Sieckenius de Souza*

(S) Going Global With Personas  
*Lene Nielsen, Kira Storgaard Nielsen, Jan Stage and Jane Billestrup*

(S) From Persona to Techsona  
*Susanne Bødker and Clemens Nylandsted Klokmoose*

#### **Designing with- and for people with special needs**

Time: 13:30 – 15:00

Venue: Room 1.44

Session Chair: Renette Blignaut (South Africa)

(L) Navigating, Discovering and Exploring the Web: strategies used by people with print disabilities on interactive websites

*Christopher Power, Helen Petrie, David Swallow, Emma Murphy, Bláithín Gallagher and Carlos A. Velasco*

(L) Participatory Design with Blind Users: A Scenario-based Approach

*Nuzhah Gooda Sahib, Tony Stockman, Anastasios Tombros and Oussama Metatla*

(L) Designing With Dementia: guidelines for participatory design together with persons with dementia

*Niels Hendriks, Frederik Truyen and Erik Duval*

#### **Augmented Reality**

Time: 13:30 – 15:00

Venue: Room 1.61

Session Chair: Edwin Blake (South Africa)

(L) Precise Pointing Techniques for Handheld Augmented Reality

*Thomas Vincent, Laurence Nigay and Takeshi Kurata*

(L) The Unadorned Desk: Exploiting the Physical Space around a Display as an Input Canvas

*Doris Hausen, Sebastian Boring and Saul Greenberg*

(L) Funneling and Saltation Effects for Tactile Interaction with "Detached" Out of the Body Virtual Objects

*Jaedong Lee, Sangyong Lee and Gerard J. Kim*

#### **Design and evaluation of prototypes**

Time: 13:30 – 15:00

Venue: Room 1.62

Session Chair: Peter Dalsgaard (Denmark)

(L) The Effect of Physicality on Low Fidelity Interactive Prototyping for Design Practice

*Joanna Hare, Steve Gill, Gareth Loudon and Alan Lewis*

(S) Finding-NEVO: toward radical design in HCI

*Sharon Lynn Chu, Francis Quek, Yao Wang and Rex Hartson*

(S) The Design and Usability Testing of DACADE – a tool supporting systematic data collection and analysis for design students

*Madihah Sheikh Abdul Aziz, Gitte Lindgaard and TW Allan Whitfield*

(S) Method Card Design Dimensions: a survey of card-based design tools

*Christiane Wölfel and Timothy Merritt*

#### **Gesture-based user interface design and interaction**

Time: 13:30 – 15:00

Venue: Room 1.63

Session Chair: Janet Wesson (South Africa)

(L) Towards Many Gestures to One Command: a user study for tabletops

*Yosra Rekik, Laurent Grisoni and Nicolas Roussel*

(L) User-Defined Gestures for Augmented Reality

*Thammathip Piumsomboon, Adrian Clark, Mark Billingham and Andy Cockburn*

(L) User-Defined Body Gestures for an Interactive Storytelling Scenario

*Felix Kistler and Elisabeth André*

#### **Multimodality, cross-platform studies**

Time: 13:30 – 15:00

Venue: Room 1.64

Session Chair: Nuno Nunes (Portugal)

(L) Cross-Communicability: evaluating the meta-communication of cross-platform applications

*Rodrigo de A. Maués and Simone Diniz Junqueira Barbosa*

(L) 3D Visualization and Multimodal Interaction with Temporal Information Using Timelines

*Giannis Drossis Dimitris Grammenos, Ilia Adami and Constantine Stephanidis*

(S) Activity Theory as a Tool for Identifying Design Patterns in Cross-modal Collaborative Interaction

*Oussama Metatla, Nick Bryan-Kinns, Tony Stockman and Fiore Martin*

**15:00 – 15:30: Mid-afternoon refreshments**  
Venue: Jasminum and Strelitzia Conservatories

**15:30 – 17:00: Parallel Sessions**

**Industry Day - Panel**

Time: 15:30 – 17:00

Venue: Auditorium 2

Session Chair: Susan Dray (USA)

Human-centred Design: What's happening in African Industry?

*Susan Dray, Phil Barrett, Mark Kamau, Edna Chelule, Tamara Alsheikh*

**Display manipulations**

Time: 15:30 – 17:00

Venue: Room 1.41

Session Chair: Luís Carriço (Portugal)

(L) An Evaluation of Stacking and Tiling Features within the Traditional Desktop Metaphor  
*Clemens Zeidler, Christof Lutteroth and Gerald Weber*

(L) Semi-Supervised Learning based Aesthetic Classifier for Short Animations Embedded in Web Pages

*Dipak Bansal and Samit Bhattacharya*

(S) Investigating Pointing Tasks across Angularly Coupled Display Areas

*Fabian Hennecke, Alexander De Luca, Ngo Dieu Huong Nguyen, Sebastian Boring and Andreas Butz*

(S) Switchback Cursor: mouse cursor operation for overlapped windowing

*Shota Yamanaka and Homei Miyashita*

**Mobile usage and techniques**

Time: 15:30 – 17:00

Venue: Room 1.42

Session Chair: Isabella Venter (South Africa)

(L) PointerPhone: Using Mobile Phones for Direct Pointing Interactions with Remote Displays  
*Julian Seifert, Andreas Bayer and Enrico Rukzio*

(L) Situating Asynchronous Voice in Rural Africa  
*Nicola J Bidwell and Masbulele Jay Siya*

(L) Designing Mobile Phone Interfaces for Age Diversity in South Africa: "One-World" versus Diverse "Islands"  
*Karen Renaud, R  nette Blignaut, Isabella Venter*

**Passwords: e-authentication**

Time: 15:30 – 17:00

Venue: Room 1.43

Session Chair: Anirudha Joshi (India)

(L) A Comprehensive Study of the Usability of Multiple Graphical Passwords

*Soumyadeb Chowdhury, Ron Poet and Lewis Mackenzie*

(L) Security for Diversity: studying the effects of verbal and imagery processes on user authentication mechanisms

*Marios Belk, Christos Fidas, Panagiotis Germanakos and George Samaras*

(S) Survival of the Shortest: a retrospective analysis of influencing factors on password composition

*Emanuel von Zeszschwitz, Alexander De Luca and Heinrich Hussmann*

(S) Travel Routes or Geography Facts? An Evaluation of Voice Authentication User Interfaces

*Alina Hang, Alexander De Luca, Katharina Frison, Emanuel von Zeszschwitz, Massimo Tedesco, Marcel Kockmann and Heinrich Hussmann*

**Design to support creativity**

Time: 15:30 – 17:00

Venue: Room 1.44

Session Chair: Simone Barbosa (Brazil)

(L) Systematic Integration of Solution Elements: How Does Digital Creativity Support Change Group Dynamics?

*Florian Perteneder, Susann Hahnwald, Michael Haller and Kurt Gaubinger*

(L) Evocative Computing – Creating Meaningful Lasting Experiences in Connecting with the Past

*Janet van der Linden, Yvonne Rogers, Tim Coughlan, Anne Adams, Caroline Wilson, Pablo Haya, Estefan  a Mart  n and Trevor Collins*

(L) CapTUI: Geometric Drawing with Tangibles on a Capacitive Multi-touch Display

*Rachel Blagojevic and Beryl Plimmer*

### **Gesture-based user interface design and interaction II**

Time: 15:30 – 17:00

Venue: Room 1.61

Session Chair: Jan Stage (Denmark)

(L) Gesture-Based Interaction in Domotic Environments: state of the art and HCI framework inspired by the diversity

*Ana Carla de Carvalho Correia, Leonardo Cunha de Miranda and Heiko Hornung*

(L) Thumbs Up: 3D gesture input on mobile phones using the front facing camera

*Paul Schmieder, John Hosking, Andrew Luxton-Reilly and Beryl Plimmer*

(L) User & System Cross-Learning of Gesture Commands on Pen-Based Devices

*PeiYu Li, Manuel Bouillon, Eric Anquetil and Grégoire Richard*

(L) Novel Modalities for Bimanual Scrolling on Tablet Devices

*Ross McLachlan and Stephen Brewster*

### **Text comprehensibility**

Time: 15:30 – 17:00

Venue: Room 1.63

Session Chair: Monique Noirhomme (France)

(L) Frequent Words Improve Readability and Short Words Improve Understandability for People with Dyslexia

*Luz Rello, Ricardo Baeza-Yates, Laura Dempere-Marco and Horacio Saggion*

(S) TicQR: Flexible, Lightweight Linking of Paper and Digital Content using Mobile Phones

*Jennifer Pearson, Simon Robinson, George Buchanan and Matt Jones*

(S) Evaluating the Effect of Phrase Set in Hindi Text Entry

*Mohit Jain, Khushboo Tekchandani and Khai N. Truong*

### **Cognitive workload and decision support**

Time: 15:30 – 17:00

Venue: Room 1.62

Session Chair: Gitte Lindgaard (Australia)

(L) Ambient Timer – Unobtrusively Reminding Users of Upcoming Tasks with Ambient Light

*Heiko Müller, Anastasia Kazakova, Martin Pielot, Wilko Heuten and Susanne Boll*

(L) Public Information System Interface Design Research

*Ning Zhang, Junliang Chen, Zhengjie Liu and Jun Zhang*

**17:00 – 18:30**

### **Business Meeting: WG 13.3 - Human-Computer Interaction and Disability**

Time: 17:00

Venue: Room 1.64

IFIP WG 13.3 Chair: Gerhard Weber

### **Conference Reception**

Time: 19:00

Venue: Two Oceans Aquarium



## THURSDAY 5 SEPTEMBER 2013

**08:00 – 8:55: Registration Welcome Refreshments**

Venue: Jasminum and Strelitzia Conservatories

### Day Schedule

- Plenary Session : 09:00 – 10:00
- Interactive Posters and Mid-morning Refreshments: 10:00 – 11:00
- Parallel Sessions: 11:00 – 12:30
- Lunch: 12:30 – 13:30
- Parallel Sessions: 13:30 – 15:00
- Mid-afternoon Refreshments: 15:00 – 15:30
- Parallel Sessions: 15:30 – 17:00
- 17:00 – 18:30: IFIP TC 13 Working Group and other business meetings
- 19:00 – 21: 30: Conference Reception

**9:00 – 10:00: Plenary Session**

Venue: Auditorium 2

**9:00 – 10:00: Keynote Address: Yvonne Rogers**

Session Chair: Janet Wesson (South Africa)



#### Topic: Mindful or Mindless Technology?

We are increasingly living in our digital bubbles. Even when physically together – as families and friends in our living rooms, outdoors and public places - we have our eyes glued to our own phones, tablets and laptops. The new generation of ‘all about me’ health and fitness gadgets, that is becoming more mainstream, is making it worse. Do we really need smart shoes that tell us when we are being lazy and glasses that tell us what we can and cannot eat? Is this what we want from technology – ever more forms of digital narcissism, virtual nagging and data addiction? In contrast, I argue for a radical rethink of our relationship with future digital technologies. One that inspires us, through shared devices, tools and data, to be more creative, playful and thoughtful of each other and our surrounding environments.

**About Yvonne Rogers:** Yvonne Rogers is the director of the Interaction Centre at UCL and a professor of Interaction Design. She is internationally renowned for her work in HCI and ubiquitous computing. She has been awarded a prestigious EPSRC dream fellowship to rethink the relationship between ageing, computing and creativity. She is known for her visionary research agenda of user engagement in ubiquitous computing and has pioneered an approach to innovation and ubiquitous learning. Her current research focuses on behavioural change, through augmenting everyday, learning and collaborative work activities with interactive technologies. She has published over 200 articles, a new book on HCI Theory (2012) and is a co-author of the definitive textbook on Interaction Design and HCI now in its 3rd edition that has sold over 150,000 copies worldwide. She is also a Fellow of the British Computer Society and the ACM's CHI Academy.



**10:00 – 11:00 : Interactive Poster Session and Mid-morning Refreshments**

Venue: Jasminum and Strelitzia Conservatories

**Interactive Posters**

|   |   |
|---|---|
| Adding Vibrotactile Feedback to Large Interactive Surfaces<br><i>Julian Seifert, Markus Packeiser and Enrico Rukzio</i>   | Supporting Improved Maternity Care by Midwives: design opportunities & lessons learned<br><i>Abdullah Al Mahmud and David Keyson</i>  |
| Analysis and Visualization of Interactions with Mobile Web Applications<br><i>Paolo Burzacca and Fabio Paternò</i>  | Technology Enhanced PBL in HCI Education: a Case Study<br><i>Christina Vasiliou, Andri Ioannou and Panayiotis Zaphiris</i>  |
| Beats Down: Using Heart Rate for Game Interaction in Mobile Settings<br><i>Claudia Stockhausen, Justine Smyzek and Detlef Krömker</i>   | The 'Relay Ideation' Technique: moving from problem understanding to problem solving in the design process<br><i>Karin Slegers, Pieter Duysburgh and An Jacobs</i>  |
| Cultural Congruence and Rating Scale Biases in Homepages<br><i>Gitte Lindgaard, Cathy Dudek and Gerry Chan</i>  | The Effect of Stress on Cognitive Load Measurement<br><i>Dan Conway, Ian Dick, Zhidong Li, Yang Wang and Fang Chen</i>  |
| Diverse Ecologies – Interdisciplinary Development for Cultural Education<br><i>Michael Heidt, Kalja Kanellopoulos, Linda Pfeiffer and Paul Rosenthal</i>  | The PEW Framework for Worth Mapping<br><i>Fatoumata Camara, Gaëlle Calvary and Rachel Demumieux</i>   |
| Evaluation of PhonAge: an adapted smartphone interface for elderly people<br><i>Farah Arab, Yasir Malik and Bessam Abdulrazak</i>   | The Profile of Law Clerks Using Judiciary Informatics in Turkey<br><i>Zerrin Sungur, Özlem Alpu, Özlem Oktal and Berna Yazıcı</i>   |
| Experimentally Manipulating Positive User Experience Based on the Fulfilment of User Needs<br><i>Andreas Sonnleitner, Marvin Pawlowski, Timm Kässer and Matthias Peissner</i>   | Towards a Communication System for People with Athetoid Cerebral Palsy<br>Yohan guerrier, Christophe Kolski and Franck Poirier  |
| Floffy: designing an outdoor robot for children<br><i>Omar Mubin, Luke Vink, Pieter Oosterwijk, Abdullah Al Mahmud and Suleman Shahid</i>   | Towards Supporting the Existing Workplace Practices of a Community of Brazilian Healthcare Professionals<br><i>Roberto Calderon, Sidney Fels and Junia Anacleto</i>   |
| Human-Spreadsheet Interaction<br><i>Andrea Kohlhasse</i>  | Traveller: an interactive cultural training system controlled by user-defined body gestures<br><i>Felix Kistler, Elisabeth André, Samuel Mascarenhas, André Silva, Ana Paiva, Nick Degens, Gert Jan Hofstede, Eva Krumhuber, Arvid Kappas and Ruth Aylett</i> |
| Improving Students Learning Programming Skills with ProGames - programming through games system<br><i>Raquel Hijón-Neira, Ángel Velázquez-Iturbide, Celeste Pizarro-Romero and, Luís Carriço</i>  | Usability Guidelines for Mobile Devices: length of hyperlinks<br><i>Eva Garcia-Lopez, Antonio Garcia-Cabot, Luis de-Marcos and Jose-Ramon Hilera</i>  |
| Long-Term Experiences with an Iterative Design of a QR-Code-Based Payment System for Beverages<br><i>Max-Emanuel Maurer, Alexander De Luca, Alina Hang, Doris Hausen, Fabian Hennecke, Sebastian Loehmann, Henri Palleis, Hendrik Richter, Simon Stusak, Aurélien Tabard, Sarah Tausch, Emanuel von Zezschwitz, Franziska Schwamb, Heinrich Hussmann and Andreas Butz</i> | User-Centered Design between Cultures: designing for and with Immigrants<br><i>Jan Bobeth, Stephanie Schreitter, Susanne Schmehl, Stephanie Deutsch and Manfred Tscheligi</i>   |

|  |  |
|--|--|
| <p>Moment Machine: opportunities and challenges of posting situated snapshots onto networked public displays<br/> <i>Nemanja Memarovic, Ava Fatah gen Schieck, Efstathia Kostopoulou, Moritz Behrens and Martin Traunmueller</i></p> | <p>Using Graphical Representations to Support the Calculation of Infusion Parameters<br/> <i>Sandy J. J. Gould, Anna L. Cox and Duncan P. Brumby</i></p>   |
| <p>Overview Scrollbar: a scrollbar showing an entire document as an overview<br/> <i>Ko Mizoguchi, Daisuke Sakamoto and Takeo Igarashi</i></p>   | <p>Visual Conversational Interfaces to Empower Low-literacy Users<br/> <i>Sheetal Agarwal, Jyoti Grover, Meghna Singh, Arun Kumar, Monia Puri and Christian Remy</i></p>                                   |
| <p>Participatory Design for Cultural Representation: a cultural transparency perspective<br/> <i>Amalia Sabiescu and Nemanja Memarovic</i></p>   | <p>Visual Indication While Sharing Items from a Private 3D Portal Room UI to Public Virtual Environments<br/> <i>Minna Pakanen, Leena Arhippainen, Jukka H. Vattjus-Anttila and Olli-Pekka Pakanen</i></p> |
| <p>Reducing Driver Task Load and Promoting Sociability through an Affective Intelligent Driving Agent (AIDA)<br/> <i>Kenton Williams and Cynthia Breazeal</i></p>  | <p>Web Design for Science Museum towards engaging user experience<br/> <i>Mohd Syaheezam Asyraq Yamin and Eswati Azni Jaafar</i></p>   |
| <p>Semantic Modelling in Support of Adaptive Multimodal Interface Design<br/> <i>Elena Tsiporkova, Anna Hristoskova, Tom Tourwé and Tom Stevens</i></p>  | <p>Workshop Posters<br/>           Doctoral Consortium Posters<br/>           African Masters Consortium Posters</p>   |

## 11:00 – 12:30: Parallel Sessions

### Special Interest group

Time: 11:00 – 12:30

Venue: Auditorium 2

Session Chair: David Lamas (Estonia)

Promoting Human-Computer Interaction Values and Practices in Small and Emerging Economies  
*David Lamas, Panayiotis Zaphiris, Georgios Christou and Alfredo Terzoli*



### Mobile phone applications

Time: 11:00 – 12:30

Venue: Room 1.41

Session Chair: Judy van Biljon (South Africa)

(L) Communicating in a Ubicomp World: interaction rules for guiding design of mobile interfaces  
*S. Shyam Sundar, Xue Dou and Sangmeel Lee*

(S) Using Video Prototypes for Evaluating Design Concepts with Users: a comparison to usability testing  
*Matthijs Zwinderman, Rinze Leenheer, Azadeh Shirzad, Nikolay Chupriyanov, Glenn Veugen, Biyong Zhang and Panos Markopoulos*

(S) Flow Specification Patterns of End-User Programmers: lessons learnt from a health mobile application authoring environment design  
*Filipe Fernandes, Luís Duarte and Luís Carriço*

(S) MoCoShoP: supporting mobile and collaborative shopping and planning of interiors  
*Julian Seifert, Dennis Schneider and Enrico Rukzio*

(S) Usability and Utility Needs of Mobile Applications for Business Management among MSEs: A case of Myshop in Uganda  
*Rehema Baguma, Marko Myllyluoma; Nancy Mwakaba, Bridget Nakajubi*

**Learning and knowledge-sharing**

Time: 11:00 – 12:30

Venue: Room 1.42

Session Chair: Jan Gulliksen (Sweden)

(L) Usability Specialists as Boundary Spanners – an Appraisal of Usability Specialists' Work in Multiparty Distributed Open Source Software Development Effort  
*Netta Iivari*

(L) Introducing New Perspectives in the Use of Social Technologies in Learning: social constructionism  
*Antigoni Parmaxi, Panayiotis Zaphiris, Eleni Michailidou, Salomi Papadima-Sophocleous and Andri Ioannou*

(S) Vimprint: exploring alternative learning through low-end mobiles  
*Sheetal K. Agarwal, Jyoti Grover, Anupam Jain and Arun Kumar*

(S) Informing the Design of an Authoring Tool for Developing Social Stories  
*Aurora Constantin, Helen Pain and Annalu Waller*

**Cross-cultural, intercultural and social issues**

Time: 11:00 – 12:30

Venue: Room 1.43

Session Chair: Jose Abdelnour-Nocera (UK)

(L) Your Phone has Internet - why are you at a library PC? Re-imagining public access in the mobile internet era  
*Jonathan Donner and Marion Walton*

(S) Considering Communities, Diversity and the Production of Locality in the Design of Networked Urban Screens  
*Wallis Motta, Ava Fatah gen Schieck, Holger Schnädelbach, Efsthia Kostopoulou Kostopoulou, Moritz Behrens, Steve North and Lei Ye*

(S) Web Accessibility in Africa: a Study of Three African Domains  
*Daniel Costa, Nádia Fernandes, Sofia Neves, Carlos Duarte, Raquel Hijón-Neira and Luís Carriço*

(S) Growing Existing Aboriginal Designs to Guide a Cross-Cultural Design Project  
*Margot Brereton, Paul Roe, Thomas Amagula, Serena Bara, Judy Lalara and Anita Lee Hong*

**UX in work / educational contexts**

Time: 11:00 – 12:30

Venue: Room 1.44

Session Chair: Darelle van Greunen (South Africa)

(L) Finger on the Pulse: the value of the activity stream in the enterprise  
*Ido Guy, Tal Steier, Maya Barnea, Inbal Ronen and Tal Daniel*

(L) Relationship-based business process crowdsourcing?  
*Jacki O'Neill and David Martin*

(S) User Experience and Learning Experience in Online HCI Courses"  
*Saila Ovaska*

**Tabletop computing**

Time: 11:00 – 12:30

Venue: Room 1.61

Session Chair: Andrew Smith (South Africa)

(L) Dynamic Tangible User Interface Palettes  
*Martin Spindler, Victor Cheung and Raimund Dachselt*

(L) TIDE: Lightweight Device Composition for Enhancing Tabletop Environments with Smartphone Applications  
*Léo Sicard, Aurélien Tabard, Juan David Hincapié-Ramos and Jakob E. Bardram*

(L) Dynamic Spatial Positioning: Physical Collaboration around Interactive Table by Children in India  
*Izdihar Jamil, Kenton O'Hara, Mark Perry, Abhijit Karnik, Mark T Marshall, Swathi Jha, Sanjay Gupta and Sriram Subramanian*

**3D navigation**

Time: 11:00 – 12:30

Venue: Room 1.62

Session Chair: Nuno Nunes (Portugal)

(L) Assessing the Impact of Automatic Vs. Controlled Rotations on Spatial Transfer with a Joystick and a Walking Interface in VR  
*Florian Larrue, Hélène Sauzéon, Déborah Follope, Grégory Wallet, Jean-René Cazalets, Christian Gross, Martin Hachet and Bernard N'Kaoua*

(L) Designing Intuitive Multi-touch 3D Navigation Techniques  
*Damien Marchal, Clément Moerman, Géry Casiez and Nicolas Roussel*

(L) Truly Useful 3D Drawing System for Professional Designer by “Life-sized and Operable” Feature and New Interaction  
*Shun'ichi Tano, Shinya Yamamoto, Junko Ichino, Tomonori Hashiyama and Mitsuru Iwata*

#### **Social collaborative interaction**

Time: 11:00 – 12:30

Venue: Room 1.63

Session Chair: Toni Robertson (Australia)

(L) Paraplay: exploring playfulness around physical console gaming

*John Downs, Frank Vetere and Steve Howard*

(S) A Tale of Two Puppets, Two Avatars and Two Countries

*Yoram I. Chisik, Monchu Chen and M. Clara Corriea Martins*

(S) Likeness and Dealbreakers: interpreting interpersonal compatibility from online music profiles  
*Mo Kudeki and Karrie Karahalios*

(S) Avalanche! Reanimating Multiple Roles in Child Computer Interaction Design

*Timo Göttel*

#### **Cognitive workload**

Time: 11:00 – 12:30

Venue: Room 1.64

Session Chair: Stacy Hobson (USA)

(L) Information Holodeck: thinking in technology ecologies

*Sharon Lynn Chu and Francis Quek*

(L) Mobility Matters: identifying cognitive demands that are sensitive to orientation

*G. Michael Poor, Guy Zimmerman, Dale S. Klopfer, Samuel D. Jaffee, Laura Marie Leventhal and Julie Barnes*

(S) Managing Personal Information across Multiple Devices: Challenges and Opportunities

*Simone Beets and Janet Wesson*

(S) GSR and Blink Features for Cognitive Load Classification

*Nargess Nourbakhsh, Yang Wang and Fang Chen*

#### **12:30 – 13:30: Lunch**

Venue: Jasminum and Strelitzia Conservatories

#### **13:30 – 15:00: Parallel Sessions**

##### **Panel**

Time: 13:30 – 15:00

Venue: Auditorium 2

Session Chair: Jose Abdelnour-Nocera (UK)

Seeing ‘the obvious’ as Subject and Object of Cross-cultural HCI Design

*Jose Abdelnour-Nocera, Heike Winschiers, Torkil Clemmensen and Christian Sturm*

##### **E-input/output devices (e-readers, whiteboards)**

Time: 13:30 – 15:00

Venue: Room 1.41

Session Chair: Gitte Lindgaard (Australia)

(L) The Mysterious Whiteboard

*Clemens N. Klokmoose and Olav W. Bertelsen*

(L) Reading Together as a Leisure Activity: implications for e-reading

*Michael Massimi, Rachelle Campigotto, Abbas Attarwala and Ronald M. Baecke*

(L) Leisure-Based Reading and The Place of E-Books in Everyday Life

*Annika Hupfeld, Abigail Sellen, Kenton O'Hara and Tom Rodden*

**Learning tools, learning contexts**

Time: 13:30 – 15:00

Venue: Room 1.42

Session Chair: Saila Ovaska (Finland)

(L) Improving Evaluation Honesty and User Experience in e-learning by Increasing Evaluation Cost and Social Presence

*Juha Leino and Tomi Heimonen*

(L) The ReflecTable: bridging the gap between theory and practice in design education

*Jonathan Hook, Thomas Hjerimitslev, Ole Sejer Iversen and Patrick Olivier*

(S) Interacting with Augmented Reality: how does location-based AR enhance learning?

*Ruobing Li, Bo Zhang, S. Shyam Sundar and Henry Been-Lim Duh*

(S) HCI for City Farms: design challenges & opportunities

*Peter Lyle, Jaz Hee-jeong Choi and Marcus Foth*

(S) Towards Engaged Consumption: new sources of inspiration for eco-feedback design

*Stephen Snow and Margot Brereton*

(S) WattsBurning on my mailbox: a tangible art inspired eco-feedback visualization for sharing energy consumption

*Filipe Quintal, Mary Barreto, Nuno Nunes, Valentina Nisi and Lucas Pereira*

(S) Sustainability at Home: an exploratory study on monitoring needs and energy management actions of solar power producers

*Dounia Lahoual and Myriam Fréjus***Interface layout and data entry**

Time: 13:30 – 15:00

Venue: Room 1.43

Session Chair: Anirudha Joshi (India)

(L) Evaluating Direct Manipulation Operations for Constraint-Based Layout

*Clemens Zeidler, Christof Lutteroth, Wolfgang Stuerzlinger and Gerald Weber*

(S) KLM Form Analyzer: automated evaluation of web form filling tasks using human performance models

*Christos Katsanos, Nikos Karousos, Nikolaos Tselios, Michalis Xenos and Nikolaos Avouris*

(S) The Evolution of Number Entry: a case study of the telephone

*Parisa Eslambolchilar, Julie Webster and Gerrit Niezen*

(S) A User Study with GUIs Tailored for Smartphones

*David Raneburger, David Alonso-Ríos, Roman Popp, Hermann Kaindl and Jürgen Falb*

(S) A Comparison of List vs. Hierarchical UIs on Mobile Phones for Non-Literate Users

*Indrani Medhi, Kentaro Toyama, Anirudha Joshi, Uday Athavankar and Edward Cutrell***Health / medical devices**

Time: 13:30 – 15:00

Venue: Room 1.61

Session Chair: Funmi Adebisin (South Africa)

(L) Increasing Accuracy by Decreasing Presentation Quality in Transcription Tasks

*Frank Soboczenski, Paul Cairns and Anna Cox*

(S) Adoption and Appropriation: a design process from HCI research at a Brazilian neurological hospital

*Junia Anacleto and Sidney Fels*

(S) You Can't Touch This: potential perils of patient interaction with clinical medical devices

*Paul Noble and Ann Blandford*

(S) Development of Novel eHealth Services for Citizen Use – Current System Engineering vs. Best Practice in HCI

*Isabella Scandurra, Jesper Holgersson, Thomas Lind and Gunilla Myreteg*

(S) Chronicles: Supporting conversational narrative in alternative and augmentative communication

*Annalu Waller, Rachel Menzies, Daniel Herron, Suzanne Prior, Rolf Black and Thilo Kroll***Sustainability**

Time: 13:30 – 15:00

Venue: Room 1.44

Session Chair: Valentina Nisi (Portugal)

(L) Exploring Reactions to Widespread Energy Monitoring

*James A. Colley, Benjamin Bedwell, Andy Crabtree and Tom Rodden***Model-based user interface design**

Time: 13:30 – 15:00

Venue: Room 1.62

Session Chair: Julio Abascal (Spain)

(L) Model Assisted Creativity Sessions for the Design of Mixed Interactive Systems: a protocol analysis

*Christophe Bortolaso and Emmanuel Dubois*

(L) Conception of Ambiguous Mapping and Transformation Models  
*Christopher Martin, Matthias Freund, Henning Hager and Annerose Braune*

(L) Model-Based Self-Explanatory UIs for Free, but Are They Valuable?  
*Alfonso García Frey, Gaëlle Calvary, Sophie Dupuy-Chessa and Nadine Mandran*

#### **Social behaviour, collaboration and presence**

Time: 13:30 – 15:00

Venue: Room 1.63

Session Chair: S. Shyam Sundar (USA)

(L) Social Network Users' Religiosity and the Design of Post Mortem Aspects  
*Cristiano Maciel and Vinicius Carvalho Pereira*

(S) Social Influence from Personalized Recommendations to Trusting Beliefs of Websites: Intermediate Role of Social Presence  
*Yanan Li and Yong Wang*

(S) Perceptions of Facebook Privacy and Career Impression Management  
*Danielle Pilcer and Andrew Thatcher*

(S) An Experimental Study of Chinese Shopping Related Sharing Behaviors  
*Min Li, Jun Zhang, Zhengjie Liu and Graham Johnson*

(S) Simplifying Remote Collaboration Through Spatial Mirroring  
*Fabian Hennecke, Simon Voelker, Maximilian Schenk, Hauke Schaper, Jan Borchers and Andreas Butz*

#### **Designing for inclusiveness I**

Time: 13:30 – 15:00

Venue: Room 1.64

Session Chair: Gerhard Weber (Germany)

(L) Lessons Learned from Crowd Accessibility Services  
*Hironobu Takagi, Susumu Harada, Daisuke Sato and Chieko Asakawa*

(L) Accessibility of Public Web Services: A Distant Dream?  
*Kristiina Nurmela, Antti Pirhonen and Airi Salminen*

(L) Augmenting Accessibility Guidelines with User Ability Rationales  
*Christophe Ponsard, Pascal Beaujeant and Jean Vanderdonckt*

#### **15:00 – 15:30: Mid-afternoon refreshments**

Venue: Jasminum and Strelitzia Conservatories

#### **15:30 – 17:00: Parallel Sessions**

##### **Human-work interaction design**

Time: 15:30 – 17:00

Venue: Room 1.41

Session Chair: Tom Gross (Germany)

(L) Do Usability Professionals Think about User Experience in the Same Way as Users and Developers Do?  
*Torkil Clemmensen, Morten Hertzum, Jiaoyan Yang and Yanan Chen*

(L) Here or There?: how configuration of transnational teams impacts Social capital  
*Julia Haines, Judith Olson and Gary Olson*

(L) Computer-Supported Work in Partially Distributed and Co-Located Teams: the influence of mood feedback  
*Andreas Sonderegger, Denis Lalanne, Luisa Bergholz, Fabien Ringeval and Juergen Sauer*

##### **Diversity / ICT in social development**

Time: 15:30 – 17:00

Venue: Room 1.42

Session Chair: Zhengjie Lui (China)

(L) Availability4D: refining the link between availability and adoption in marginalised communities  
*Fritz Meissner and Edwin Blake*

(S) Designing a Platform for Participatory Urbanism: Transforming Dialogue into Action in Underserved Communities  
*Leonardo Giusti, Amelia Schladow, Amar Boghani, Steve Pomeroy, Nicholas Wallen and Federico Casalegno*

(S) A Scandinavian Approach to Designing with Children in a Developing Country - Exploring the Applicability of Participatory Methods  
*Nahid Wakil and Peter Dalsgaard*



(S) Communication Choices to Engage Participation of Rural Indonesian Craftspeople in Development Projects  
*Ellya Zulaikha and Margot Brereton*

(S) Content Prototyping – An Approach for Engaging Non-Technical Users in Participatory Design  
*Maletsabisa Molapo and Gary Marsden*

#### **Physical ergonomics**

Time: 15:30 – 17:00

Venue: Room 1.43

Session Chair: Gary Marsden (South Africa)

(L) Modeless Pointing with Low-Precision Wrist Movements  
*Theophanis Tsandilas, Emmanuel Dubois and Mathieu Raynal*

(L) Exploring the Use of Distributed Multiple Monitors Within an Activity-Promoting Sit-and-Stand Office Workspace  
*Kathrin Probst, David Lindlbauer, Florian Perteneder, Michael Haller, Bernhard Schwartz and Andreas Schrempf*

(S) Wands are Magic: a comparison of devices used in 3D pointing interfaces  
*Martin Henschke, Tom Gedeon, Richard Jones, Sabrina Caldwell and Dingyun Zhu*

#### **Data entry mechanisms and devices**

Time: 15:30 – 17:00

Venue: Room 1.44

Session Chair: Jan Gulliksen (Sweden)

(L) Predictive Input Interface of Mathematical Formulas  
*Yoshinori Hijikata, Keisuke Horie and Shogo Nishida*

(L) A Performance Review of Number Entry Interfaces  
*Patrick Oladimeji, Harold Thimbleby and Anna Cox*

(L) Selection-Based Mid-Air Text Entry on Large Displays  
*Anders Markussen, Mikkel R. Jakobsen and Kasper Hornbæk*

#### **Narratives in design**

Time: 15:30 – 17:00

Venue: Room 1.61

Session Chair: Hermann Kaindl (Austria)

(L) Using Narrative Research and Portraiture to Inform Design Research  
*Connie Golsteijn and Serena Wright*

(L) Storytelling in Visual Analytics tools for Business Intelligence  
*Micheline Elias, Marie-Aude Aufaure and Anastasia Bezerianos*

(L) Beyond Rhetoric to Poetics in IT Invention  
*Annie Gentes and Ted Selker*

#### **Social media**

Time: 15:30 – 17:00

Venue: Room 1.62

Session Chair: Henry Duh (Australia)

(L) Who Would Pay for Facebook? Self esteem as a predictor of user behavior, identity construction and valuation of virtual possessions  
*Jiaqi Nie and S. Shyam Sundar*

(L) Helping Me Helping You: Designing to Influence Health Behaviour Through Social Connections  
*Noreen Kamal, Sidney Fels, Joanna McGrenere and Kara Nance*

(S) Exploring Twitter Interactions through Visualization Techniques: users impressions and new possibilities  
*Guilherme Coletto Rotta, Vinícius Silva de Lemos, Ana Luiza Moura da Cunha, Isabel Harb Manssour, Milene Selbach Silveira and André Fagundes Pase*

#### **Gaze-enabled interaction design**

Time: 15:30 – 17:00

Venue: Room 1.63

Session Chair: Kari-Jouko Räihä (Finland)

(L) Eyes Only: navigating hypertext with gaze  
*Abdul Moiz Penkar, Christof Lutteroth and Gerald Weber*

(L) Eye Pull, Eye Push: moving objects between large screens and personal devices with gaze & touch  
*Jayson Turner, Jason Alexander, Andreas Bulling, Dominik Schmidt and Hans Gellersen*

(L) Tools for a Gaze-controlled Drawing Application – Comparing Gaze Gestures against Dwell Buttons  
*Henna Heikkilä*

**17:00 – 18:00**

**Meeting: INTERACT 2015 Organization Committee**

Time: 17:00

Venue: Room 1.41

Chairs: Tom Gross and Julio Abascal

**18:30 – 22:30**

**Conference Dinner**

Time: 18:30

Venue: Clock Tower Pavillion





## FRIDAY 6 SEPTEMBER 2013

**08:30 – 8:55: Registration and Welcome Refreshments**

Venue: Jasminum and Strelitzia Conservatories

### Day Schedule

- Parallel Sessions: 09:00 – 10:30
- Mid-morning Refreshments: 10:30 – 11:00
- Parallel Sessions: 11:00 – 12:30
- Lunch: 12:30 – 13:30
- Plenary Session: 13:30 – 15:30
- Closing Reception: 15:30 – 16:30

### 9:00 – 10:30: Parallel Session

#### Panel

Time: 09:00– 10:30

Venue: Auditorium 2

Session Chair: Darelle van Greunen (South Africa)

#### Community Collaboration

*Anicia Peters, Darelle van Greunen, Gereon Koch Kapuire, Anupama Saxena, Dan Orwa, Bongwiwe Dlutu-Siya and Nicola J. Bidwell*

(L) Sharing Experiences over Video: watching video programs together at a distance

*Anna Macaranas, Gina Venolia, Kori Inkpen and John Tang*

(L) Practices Surrounding Event Photos

*Dhaval Vyas, Anton Nijholt and Gerrit van der Veer*

#### Mobile UX and privacy concerns

Time: 09:00– 10:30

Venue: Room 1.41

Session Chair: Janet Wesson (South Africa)

(L) The Impact of Encumbrance on Mobile Interactions  
*Alexander Ng, Stephen A. Brewster and John Williamson*

(L) Nudging People Away From Privacy-Invasive Mobile Apps Through Visual Framing  
*Eun Kyoung Choe, Jaeyeon Jung, Bongshin Lee and Kristie Fisher*

(L) A Field Trial on Mobile Crowdsourcing of News Content: Factors Influencing Participation  
*Heli Väättäjä, Esa Sirkkunen and Mari Ahvenainen*

#### 3D technologies - 3D object manipulation

Time: 09:00– 10:30

Venue: Room 1.43

Session Chair: Edwin Blake (South Africa)

(L) RelicPad: A hands-on, mobile approach to collaborative exploration of virtual museum artifacts  
*Steven Neale, Winyu Chinthammit, Christopher Lueg and Paddy Nixon*

(L) A One-Handed Multi-Touch Method for 3D Rotations

*Doug Scheurich and Wolfgang Stuerzlinger*

(S) HandsIn3D: Supporting remote guidance with immersive virtual environments  
*Weidong Huang, Leila Alem and Franco Tecchia*

(S) MotionBender: A gesture-based interaction technique for editing motion paths  
*Frederic Raber, Quan Nguyen and Michael Kipp*

#### Supporting shared activities

Time: 09:00– 10:30

Venue: Room 1.42

Session Chair: Gerrit van der Veer (The Netherlands)

(L) F-formations in Cooking Together: a digital ethnography using YouTube  
*Jeni Paay, Jesper Kjeldskov, Mikael Skov and Kenton O'Hara*

**Multimodal user interface design**

Time: 09:00– 10:30

Venue: Room 1.44

Session Chair: Elise van den Hoven (Australia)

(L) Comparing Input Modalities for Peripheral Interaction: A Case Study on Peripheral Music Control  
*Doris Hausen, Hendrik Richter, Adalie Hemme and Andreas Butz*

(L) When Paper Meets Multi-Touch: a study of multi-modal interactions in air traffic control  
*Cheryl Savery, Christophe Hurter, Rémi Lesbordes, Maxime Cordeil and T.C. Nicholas Graham*

(L) Linetic: Technical, Usability and Aesthetic Implications of a Ferrofluid-based Organic User Interface  
*Jeffrey Tzu Kwan Valino Koh, Kasun Karunanayaka and Ryohei Nakatsu*

**Designing for inclusiveness II**

Time: 09:00– 10:30

Venue: Room 1.61

Session Chair: Julio Abascal (Spain)

(L) Designing for Different Users and Multiple Devices: a roadmap towards inclusive environments  
*Ig Ibert Bittencourt, Maria Cecília Baranauskas, Diego Dermeval, Juliana Braga and Roberto Pereira*

(L) User Control in Adaptive User Interfaces for Accessibility  
*Matthias Peissner and Rob Edlin-White*

(S) Vibro-Tactile Enrichment Improves Blind User Interaction with Mobile Touchscreens  
*Maria Claudia Buzzi, Marina Buzzi, Barbara Leporini and Maria Teresa Paratore*

**Novel user interfaces**

Time: 09:00– 10:30

Venue: Room 1.62

Session Chair: Gary Marsden (South Africa)

(L) A New Approach to Walking in Place  
*Luis Bruno, Joao Pereira and Joaquim Jorge*

(L) Disambiguation Canvas: a precise selection technique for virtual environments  
*Henrique G. Debarba, Jerônimo G. Grandi, Anderson Maciel, Luciana Nedel and Ronan Boulic*

(L) Full Semantic Transparency: overcoming boundaries of applications  
*Andrea Kohlhasse, Michael Kohlhasse, Constantin Jucovschi and Alex Toader*

**Software Development**

Time: 09:00– 10:30

Venue: Room 1.63

Session Chair: Judy van Biljon (South Africa)

(L) Existing but not Explicit - The User Perspective in Scrum Projects in Practice  
*Åsa Cajander, Marta Larusdottir and Jan Gulliksen*

(L) Authoring Support for Post-WIMP Applications  
*Katharina Gerken, Sven Frechenhäuser, Ralf Dörner and Johannes Luderschmidt*

(S) Fast Train to DT: a practical guide to coach design thinking in software industry  
*Visvapriya Sathiyam and Muktha Hiremath*

**10:30 - 11:00: Mid-morning refreshments**

Venue: Jasminum and Strelitzia Conservatories

## 11:00 – 12:30: Parallel Session

### Panel

Time: 11:00– 12:30

Venue: Auditorium 2

Session Chair: Thomas Binder (Denmark)

What Can Design Laboratories Do?

*Thomas Binder, Lone Malmborg, Per-Anders Hillgren, Jörn Messeter, Yanki Lee and Sibukele Gumbo*

(L) What Do You See In The Cloud? Understanding the Cloud-Based User Experience through Practices  
*John C. Tang, Jed R. Brubaker and Catherine C. Marshall*

(L) Evaluating User Experience for Interactive Television: Towards the Development of a Domain-Specific User Experience Questionnaire  
*Regina Bernhaupt and Michael Pirker*

### Mobile interaction design

Time: 11:00– 12:30

Venue: Room 1.41

Session Chair: Rehema Baguma (Uganda)

(L) Awareness, Transience and Temporality: design opportunities from Rah Island  
*Pedro Ferreira, Pedro Sanches and Alexandra Weilenmann*

(S) Extending Mobile Interfaces with External Screens  
*Julian Seifert, Dennis Schneider and Enrico Rukzio*

(S) Comparison of Phone-based Distal Pointing Techniques for Point-Select Tasks  
*Mohit Jain, Andy Cockburn and Sriganesh Madhvanath*

### Creating effective 3D displays

Time: 11:00– 12:30

Venue: Room 1.44

Session Chair: Monique Noirhomme (Belgium)

(L) Touching the Void Revisited: analyses of touch behavior on and above tabletop surfaces  
*Gerd Bruder, Frank Steinicke and Wolfgang Stuerzlinger*

(L) Understanding Hand Degrees of Freedom and Natural Gestures for 3D Interaction on Tabletop  
*Remi Brouet, Renaud Blanch and Marie-Paule*

(L) Comparison of User Performance in Mixed 2D-3D Multi-Display Environments  
*Abhijit Karnik, Tovi Grossman and Sriram Subramanian*

### Supporting physical activity

Time: 11:00– 12:30

Venue: Room 1.42

Session Chair: Paula Alexandra Silva (Portugal)

(L) Walking in the Wild – Using an Always-on Smartphone Application to Increase Physical Activity  
*Tim Harries, Parisa Eslambolchilar, Chris Stride, Ruth Rettie and Simon Walton*

(L) The Development and Evaluation of an Interactive System for Age Related Musculoskeletal Rehabilitation in the Home  
*Mobolaji Ayode, Stephen Uzor and Lynne Baillie*

### Facilitating social behaviour and collaboration II

Time: 11:00– 12:30

Venue: Room 1.61

Session Chair: Edward White (South Africa)

(L) PolemicTweet: video annotation and analysis through tagged tweets  
*Samuel Huron, Petra Isenberg and Jean Daniel Fekete*

(L) OpinionBlocks: a crowd-powered, self-improving interactive visual analytic system for understanding opinion text  
*Mengdie Hu, Huahai Yang, Michelle X. Zhou, Liang Gou, Yunyao Li and Eben Haber*

(L) BinCam: Designing for Engagement with Facebook for Behavior Change  
*Rob Comber, Anja Thieme, Ashur Rafiev, Nick Taylor, Nicole Krämer and Patrick Olivier*

### Managing the UX

Time: 11:00– 12:30

Venue: Room 1.43

Session Chair: Darelle van Greunen (South Africa)

(L) Managing User Experience – Managing Change  
*Job Mashapa, Edna Chelule, Darelle Van Greunen and Alida Veldsman*

### Voice / Sound-based computing

Time: 11:00– 12:30

Venue: Room 1.62

Session Chair: Nicola Bidwell (South Africa)

(L) Supporting Voice Content Sharing among Underprivileged People in Urban India  
*Christian Remy, Sheetal Agarwal, Arun Kumar and Saurabh Srivastava*

(L) “Roger that!” — The Value of Adding Social Feedback in Audio-mediated Communications  
*Rahul Rajan, Joey Hsiao, Deven Lahoti and Ted Selker*

(S) Audvert: using spatial audio to gain a sense of place  
*Liam Betsworth, Nitendra Rajput, Saurabh Srivastava and Matt Jones*

(S) Rhythms of the Domestic Soundscape: ethnomethodological soundwalks for phatic technology design  
*Hanif Baharin, Sean Rintel and Stephen Viller*

### Humans and robots

Time: 11:00– 12:30

Venue: Room 1.63

Session Chair: Lars Oestreicher (Sweden)

(L) A Dog Tail for Utility Robots: Exploring Affective Properties of Tail Movement  
*Ashish Singh and James E. Young*

(L) Pebbles: User-Configurable Device Network for Robot Navigation  
*Kentaro Ishii, Haipeng Mi, Lei Ma, Natsuda Laokulrat, Masahiko Inami and Takeo Igarashi*

(S) Robots for Real: developing a participatory design framework for implementing educational robots in real-world learning environments  
*Lykke Brogaard Bertel, Dorte Malig Rasmussen and Ellen Christiansen*

### 12:30 – 13:30: Lunch

Venue: Jasminum and Strelitzia Conservatories

### 13:30 – 15:30 Plenary Session

Venue: Auditorium 2

### 13:30 – 14:30: Keynote Address: Johannes Cronje

Session Chair: Paula Kotzé (South Africa)



#### Topic: Design 3.0

The Internet is in the process of entering its third generation - known as Web 3.0. Where the first web was static and the second interactive, the third is collaborative. But the collaboration is not just between people. It is between people and things. And things are getting smarter.

Which begs the question how does this affect the way we design?

This talk will consider the implications of Web 3.0 and the way in which we are beginning to work, and then ask what it does to our role as designers, but more specifically to our role as educators.

#### About Johannes Cronje:

Johannes Cronje is the Dean of the Faculty of Informatics and Design at the Cape Peninsula University of Technology. He started his career as a schoolmaster at Pretoria boys High School, then became a lecturer in communication at Pretoria Technikon, and later a professor of Computers in Education at the University of Pretoria. He holds two masters degrees and a doctorate from the University of Pretoria, and was visiting professor at universities in Norway, Finland, Sudan and Ethiopia. He has supervised more than 70 Masters and 38 doctoral students and has published more than 40 academic articles and chapters in books. He is married to Franci and they have three children and a dog.

**14:30 – 15:30: Closing Ceremony**

INTERACT 2013 Awards Ceremony

INTERACT 2015 Announcement

Session Chairs: Paula Kotzé and Janet Wesson (South Africa)

**15:30 – 16:30: Farewell Reception**

Venue: Jasminum and Strelitzia Conservatories





## ACKNOWLEDGEMENTS

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| Pedro Moreira, Portugal               | Greg Phillips, Canada               | Saqib Saeed, Pakistan                  |
| Ann Morrison, Denmark                 | Lara Piccolo, Brazil                | Pascal Salembier, France               |
| Christiane Moser, Austria             | Emmanuel Pietriga, Chile            | Antti Salovaara, Finland               |
| Omar Mubin, Australia                 | Thomas Pietrzak, France             | Krystian Samp, Ireland                 |
| Florian Mueller, United States        | Marcelo Pimenta, Brazil             | Paulo Sampaio, Brazil                  |
| Maurice Mulvenna, United Kingdom      | Ian Pitt, Ireland                   | Jaime Sanchez, Chile                   |
| Dianne Murray, United Kingdom         | Fabio Pittarello, Italy             | Bengt Sandblad, Sweden                 |
| Rod Murray-Smith, United Kingdom      | Andreas Pleuß, Ireland              | Frode Eika Sandnes, Norway             |
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## IFIP TC13

Established in 1989, the International Federation for Information Processing Technical Committee on Human-Computer Interaction (IFIP TC13) is an international committee of 30 member national societies and 7 Working Groups, representing specialists in human factors, ergonomics, cognitive science, computer science, design and related disciplines. INTERACT is its flagship conference, staged biannually in different countries in the world.

IFIP TC13 aims to develop the science and technology of human-computer interaction (HCI) by encouraging empirical research, promoting the use of knowledge and methods from the human sciences in design and evaluation of computer systems; promoting better understanding of the relationship between formal design methods and system usability and acceptability; developing guidelines, models and methods by which designers may provide better human-oriented computer systems; and, cooperating with other groups, inside and outside IFIP, to promote user-orientation and humanization in system design. Thus, TC13 seeks to improve interactions between people and computers, encourage the growth of HCI research and disseminate these benefits worldwide.

The main orientation is toward users, especially the non-computer professional users, and how to improve human-computer relationships. Areas of study include: the problems that people have with computers; the impact on people in individual and organizational contexts; the determinants of utility, usability and acceptability; the appropriate allocation of tasks between computers and users; modelling the user to aid better system design; and harmonizing the computer to user characteristics and needs.

While the scope is thus wide, with a tendency toward general principles rather than particular systems, it is recognized that progress will only be achieved through both general studies to advance theoretical understanding and specific studies on practical issues (e.g. interface design standards, software system consistency, documentation, appropriateness of alternative communication media, human factors, guidelines for dialogue design, the problems of integrating multimedia systems to match system needs and organizational practices, etc.).

In 1999, TC13 initiated a special IFIP Award, the Brian Shackel Award, for the most outstanding contribution in the form of a refereed paper submitted to and delivered at each INTERACT. The award draws attention to the need for a comprehensive human-centered approach in the design and use of information technology in which the human and social implications have been taken into account. Since the process to decide the award takes place after papers are submitted for publication, the award is not identified in the proceedings.

IFIP TC13 stimulates working events and activities through its Working Groups (WGs) and Special Interest Groups (SIGs). WGs and SIGs consist of HCI experts from many countries, who seek to expand knowledge and find solutions to HCI issues and concerns within their domains, as outlined below.

- WG13.1 (Education in HCI and HCI Curricula) aims to improve HCI education at all levels of higher education, coordinate and unite efforts to develop HCI curricula and promote HCI teaching.
- WG13.2 (Methodology for User-Centered System Design) aims to foster research, dissemination of information and good practice in the methodical application of HCI to software engineering.
- WG13.3 (HCI and Disability) aims to make HCI designers aware of the needs of people with disabilities and encourage development of information systems and tools permitting adaptation of interfaces to specific users.
- WG13.4 (also WG2.7) (User Interface Engineering) investigates the nature, concepts and construction of user interfaces for software systems, using a framework for reasoning about interactive systems and an engineering model for developing user interfaces.
- WG13.5 (Human Error, Safety and System Development) seeks a framework for studying human factors relating to systems failure, develops leading edge techniques in hazard analysis and safety engineering of computer-based systems, and guides international accreditation activities for safety-critical systems.
- WG13.6 (Human-Work Interaction Design) aims at establishing relationships between extensive empirical work-domain studies and HCI design. It will promote the use of knowledge, concepts, methods and techniques that enable user studies to procure a better apprehension of the complex interplay between individual, social and organizational contexts and thereby a better understanding of how and why people work in the ways that they do.
- WG13.7 (Human-Computer Interaction and Visualization) is the newest of the working groups under the TC.13. It aims to establish a study and research program that will combine both scientific work and practical applications in the fields of Human-Computer Interaction and Visualization. It will integrate several additional aspects of further research areas, such as scientific visualization, data mining, information design, computer

graphics, cognition sciences, perception theory, or psychology, into this approach.

- SIG 13.1 (HCI and International Development) aims to promote the application of interaction design research, practice and education to address the needs, desires and aspirations of people in the developing world; support and develop the research, practice and education capabilities of HCI institutions and organizations based in the developing world; develop links between the HCI community in general, and IFIP TC13 in particular, with other relevant communities involved in Development, especially IFIP WG 9.4 Computers in Developing Countries.
- SIG 13.2 (Interaction Design and Children) aims to provide a forum for all things relating to interaction design and human computer interaction where the intended users or appropriators of the technology or service are children, including. The definition of children is broad rather than narrow; including toddlers and teenagers, but the core work, currently at least, is with children in junior schools.

New Working Groups and Special Interest Groups are formed as areas of significance to HCI arise. Further information is available at the IFIP TC13 website: <http://www.tc13.org>

#### IFIP TC13 Members (Country Representatives)

|   |  |  |
|---|--|--|
| <b>Australia</b><br>Judy Hammond<br>Australian Computer Society                                       | <b>Cyprus</b><br>Panayiotis Zaphiris<br>Cyprus Computer Society                            | <b>Iceland</b><br>Marta Kristin Larusdottir<br>The Icelandic Society for Information Processing (ISIP) |
| <b>Austria</b><br>Andreas Holzinger<br>Austrian Computer Society                                      | <b>Czech Republic</b><br>Vaclav Matousek<br>Czech Society for Cybernetics and Informatics  | <b>India</b><br>Anirudha Joshi<br>Computer Society of India  |
| <b>Belgium</b><br>Monique Noirhomme-Fraiture<br>Federation des Associations Informatiques de Belgique | <b>Denmark</b><br>Torkil Clemmensen<br>Danish Federation for Information Processing        | <b>Ireland</b><br>Liam J. Bannon<br>Irish Computer Society   |
| <b>Brazil</b><br>Raquel Oliveira Prates<br>Brazilian Computer Society (SBC)                           | <b>Finland</b><br>Kari-Jouko R ih  <br>Finnish Information Processing Association          | <b>Italy</b><br>Fabio Patern <br>Italian Computer Society  |
| <b>Bulgaria</b><br>Kamelia Stefanova<br>Bulgarian Academy of Sciences                                 | <b>France</b><br>Philippe Palanque<br>Soci te des Electriciens et des Electroniciens (SEE) | <b>Japan</b><br>Yoshifumi Kitamura<br>Information Processing Society of Japan                          |
| <b>Canada</b><br>Heather O'Brien<br>Canadian Information Processing Society                           | <b>Germany</b><br>Tom Gross<br>Gesellschaft fur Informatik                                 | <b>Kenya</b><br>Dan Orwa<br>Computer Society of Kenya  |
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| <b>New Zealand</b><br>Mark Apperley<br>New Zealand Computer Society (NZCS)   | <b>Singapore</b><br>Henry B.L. Duh<br>Singapore Computer Society                 | <b>Switzerland</b><br>Solange Ghernaoui<br>Swiss Federation for Information Processing      |
| <b>Nigeria</b><br>Chris C. Nwannenna<br>Nigeria Computer Society   | <b>South Africa</b><br>Janet L. Wesson<br>The Computer Society of South Africa   | <b>The Netherlands</b><br>Gerrit C. van der Veer<br>Nederlands Genootschap voor Informatica |
| <b>Norway</b><br>Dag Svanes<br>Norwegian Computer Society  | <b>Spain</b><br>Julio Abascal<br>Asociación de Técnicos de Informática (ATI)     | <b>UK</b><br>Andy Dearden<br>British Computer Society                                       |
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| <b>Portugal</b><br>Joaquim A. Jorge<br>Associação Portuguesa para o Desenvolvimento da Sociedade da Informação (APDSI) |  |   |
| <b>Expert Members</b>  |  |   |
| Paula Kotzé (South Africa)<br>Gitte Lindgaard (Australia)<br>Marco Winckler (France)                                   | Simone Diniz Junqueira Barbosa (Brazil)<br>Masaaki Kurosu (Japan)                | Nikos Avouris (Greece)<br>Zhengjie Liu (China)  |
| <b>Working Group Chairpersons</b>  |  |   |
| <b>WG13.1 (Education in HCI and HCI Curricula)</b><br>Lars Oestreicher, Sweden   | <b>WG13.4 (also 2.7) (User Interface Engineering)</b><br>Fabio Paternò, Italy    | <b>WG13.7 (Human Computer Interaction and Visualization)</b><br>Achim Ebert, Germany        |
| <b>WG13.2 (Methodology for User-Centered System Design)</b><br>Peter Forbrig, Germany                                  | <b>WG13.5 (Human Error, Safety, and System Development)</b><br>Chris Johnson, UK | <b>SIG 13.1 – HCI and International Development</b><br>Andy Dearden, UK                     |
| <b>WG13.3 (HCI and Disability)</b><br>Gerhard Weber, Germany   | <b>WG13.6 (Human-Work Interaction Design)</b><br>Torkil Clemmensen, Denmark      | <b>SIG 13.2 – Interaction Design and Children</b><br>Janet Read, UK                         |

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## MAPS and DIRECTIONS

### Cape Town International Convention Centre – Conference Main Venue

#### Physical Address:

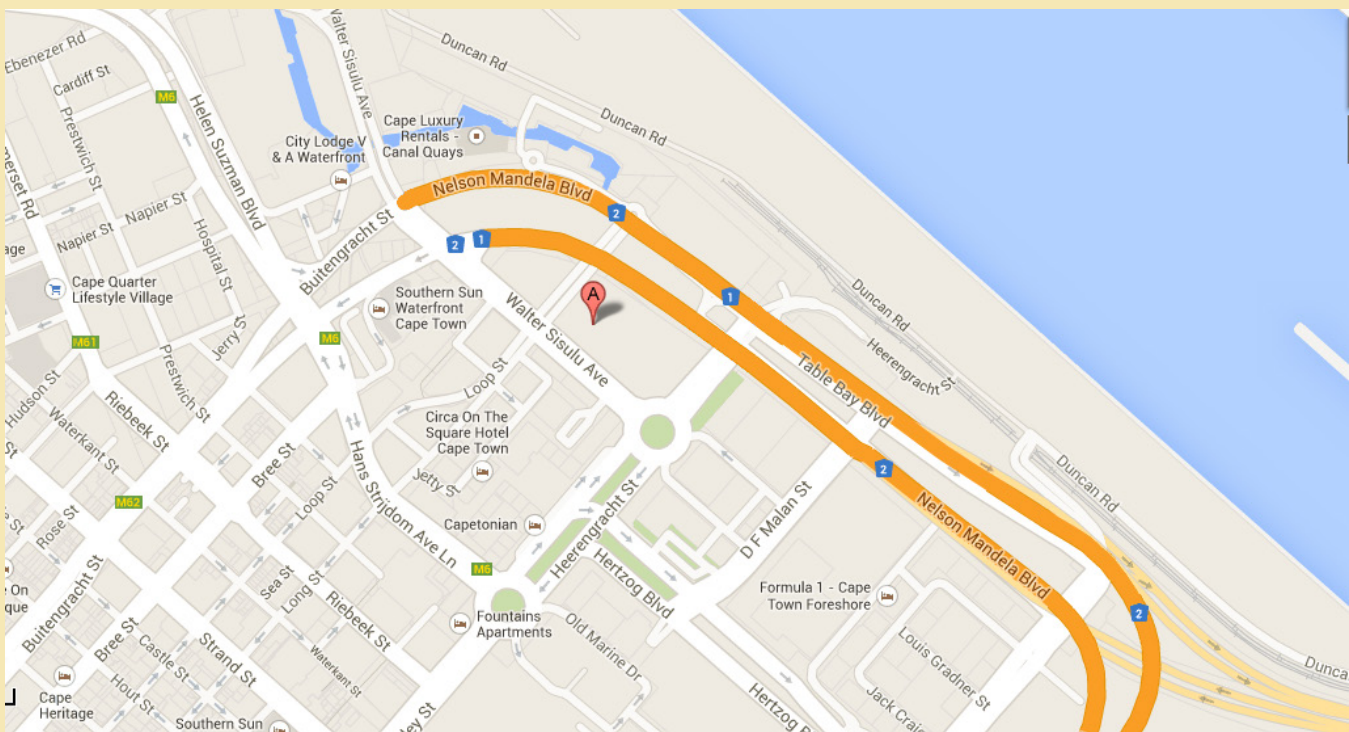
Convention Square  
1 Lower Long Street, off Walter Sisulu Avenue  
(previously known as Coen Steytler Road)  
Cape Town

(Opposite: View of CTICC Entrance at the corner of Walter Sisulu Avenue and Lower Long Street)



#### Driving Directions from Cape Town International Airport to CTICC (A on Map) (20.5 km, 20 minutes outside peak traffic):

1. From the Airport drive south on Airport Approach Road and follow the signs for Cape Town. Keep right.
2. Merge onto Settlers way / N2 via the ramp to Cape Town.
3. After 11.2 km merge into De Wall Drive / N2. Keep right (850m).
4. Continue onto Nelson Mandela Boulevard for 5.0km. From here on on you will see signs for CTICC. Keep left.
5. Turn sharp left into Walter Sisulu Avenue at the traffic light.
6. The entrance to CTICC will be on your left at the next set of traffic lights (Long Street).





## Two Oceans Aquarium – Conference Reception

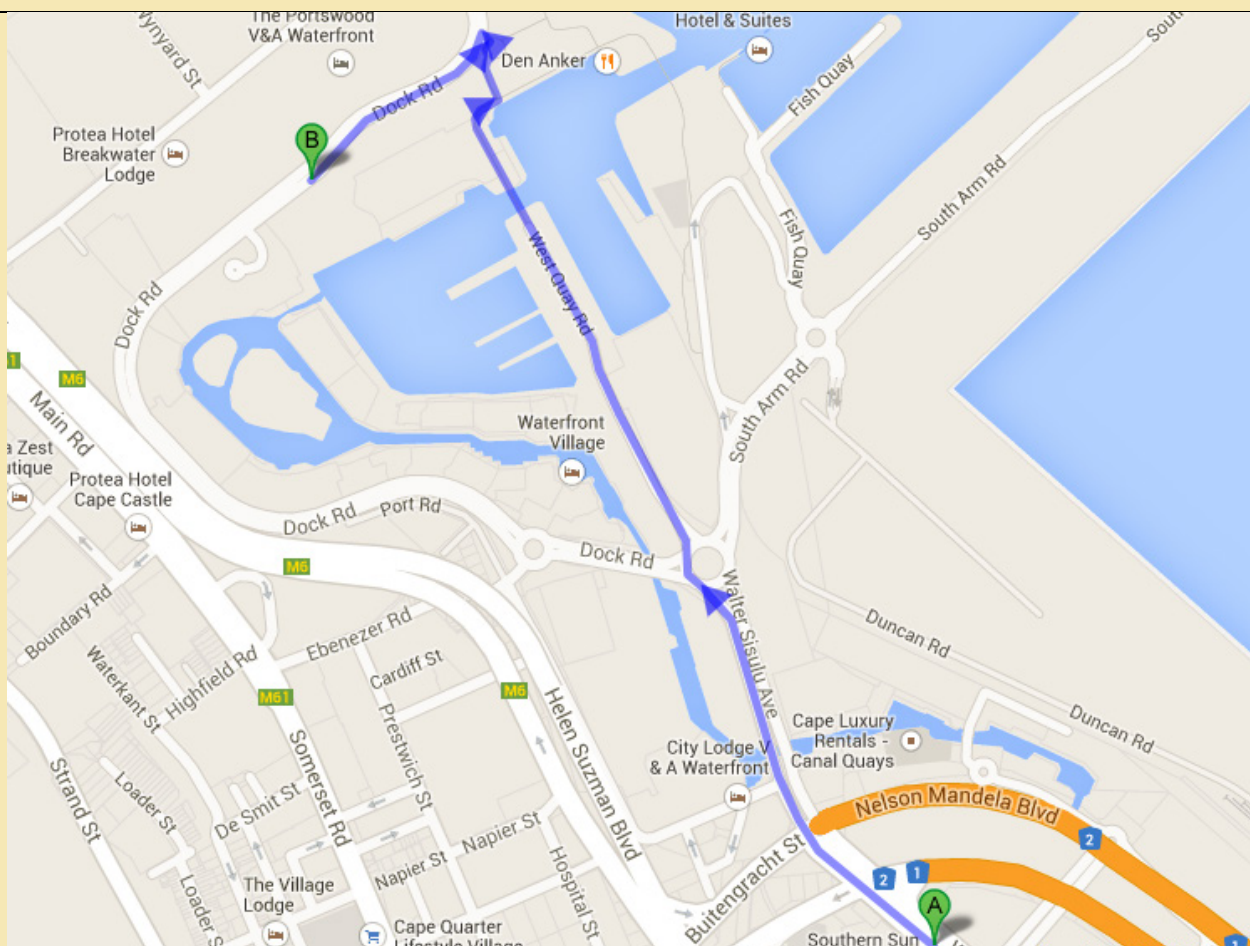
### Physical address:

Dock Road,  
V&A Waterfront  
Cape Town



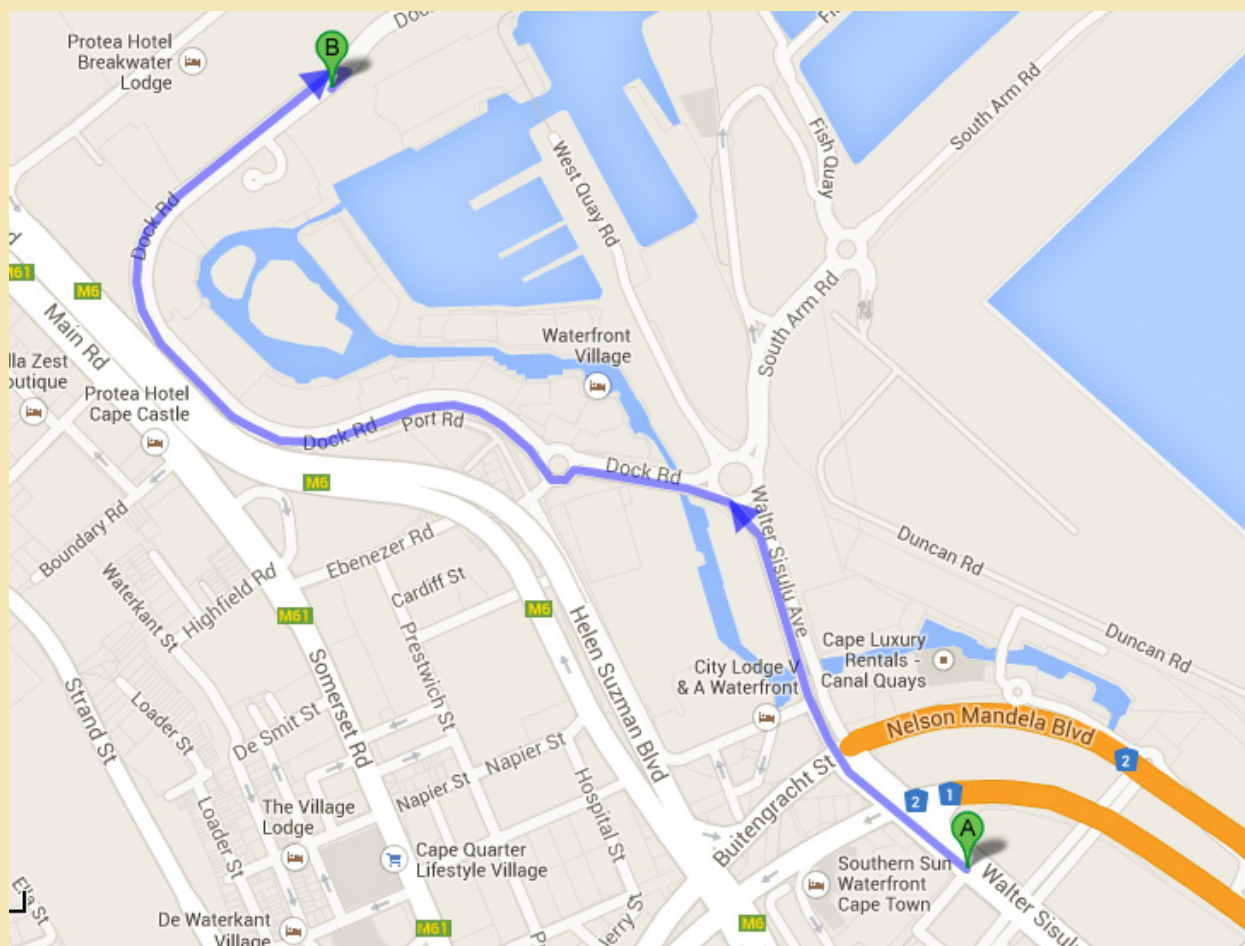
### Walking Directions from CTICC (A on Map) to Two Oceans Aquarium (B on Map) ( 1.5 KM, 20 – 25 Minutes)

1. At CTICC (Lower Long Street), cross Walter Sisulu Avenue at the traffic light. Turn right.
2. Head northwest on Walter Sisulu Avenue towards Buitengracht Street. At the Southern Sun Hotel (on the corner with Buitengracht Street), turn left toward the footbridge. Use the footbridge to cross the first lane of Buitengracht Street.
3. Cross the second lane of Buitengracht Street at the traffic light.
4. Continue on Walter Sisulu Avenue (about 300m). Cross back over the road (Walter Sisulu Avenue) at the pedestrian crossing at the Audi motor dealer on your right hand side.
5. Continue on Walter Sisulu until the roundabout (a further 300 m).
6. At roundabout, take second exit onto West Quay Road.
7. Continue on West Quay Road. and cross 2 canals (650m).
8. After second canal, turn left and then right towards Dock Road. Turn left along Dock road (100m).
9. Continue towards Two Ocean Aquarium on your left (260 m)



**Driving Directions from CTICC (A on Map) to Two Oceans Aquarium (B on Map) (1.7km, 5 minutes):**

1. Head northwest on Walter Sisulu Avenue towards Buitengracht Street
2. Cross Buitengracht Street (2 crossings)
3. Continue on Walter Sisulu Avenue until roundabout (600 m).
4. At roundabout, take first exit onto Dock Road.
5. Continue on Dock Road for 1.2 km towards Two Oceans Aquarium on your right.
6. Park in the Portwood parking garage on your left (across the road from the Two oceans Aquarium).



## Clock Tower Pavilion – Conference Dinner

### Physical Address:

The Pavilion Conference Centre  
Clock Tower Centre  
Off South Arm Road



### Walking Directions from CTICC (A on Map) to Clock Tower Pavilion (B on Map) (1.1km, 15 – 20 minutes):

1. At CTICC (Lower Long Street), cross Walter Sisulu Avenue at the traffic light. Turn right.
2. Head northwest on Walter Sisulu Avenue towards Buitengracht Street. At the Southern Sun Hotel (on the corner with Buitengracht Street), turn left toward the footbridge. Use the footbridge to cross the first lane of Buitengracht Street.
3. Cross the second lane of Buitengracht Street at the traffic light.
4. Continue on Walter Sisulu Avenue (about 300m). Cross back over the road (Walter Sisulu Avenue) at the pedestrian crossing at the Audi motor dealer on your right hand side.
5. Continue on Walter Sisulu until the roundabout (a further 300 m).
6. At roundabout, take third exit onto South Arm Road.
7. Continue for about 280m.
8. Keep left at first exit and continue for 300m.
9. The Clock Tower Centre will be on your right hand side.
10. Take 'Lifts to Shopping' to Level 2.

Follow signs for Clock Tower Pavilion/INTERACT 2013).

### Driving Directions from CTICC (A on Map) to Clock Tower Pavilion (B on Map) (1.1km, 3 minutes):

1. Head northwest on Walter Sisulu Avenue towards Buitengracht Street
2. Cross Buitengracht Street (2 crossings)
3. Continue on Walter Sisulu Avenue until roundabout (600 m).
4. At roundabout, take third exit and onto South Arm Road.
5. Continue for about 280m.
6. Keep left at first exit and continue for about 250m.
7. Turn left to 'Silo Parking'. Take far right hand lane. Drive down the Ramp into 'Level 2 Public Parking.
8. Take 'Lifts to Shopping' to Level 2.

Follow signs for Clock Tower Pavilion/INTERACT 2013).



### Map: CTICC to Clock Tower Pavilion

